

Claims:

1. A method for time stamping a document comprising:
  - receiving a time stamp receipt at an outside agency, said time stamp receipt including identifying data associated with said document and a time indication;
  - validating said time stamp receipt at said outside agency by comparing the time indication in said time stamp receipt to the current time; and
  - if said time stamp receipt is valid, binding at said outside agency said identifying data and said time indication using a cryptographic binding scheme.
2. The time stamping method of claim 1 further including transmitting said binding information to a designated party.
3. The time stamping method of claim 1 wherein said identifying data comprises a digital representation of at least a portion of said document.
4. The time stamping method of claim 3 wherein said identifying data comprises a digital sequence derived by application of a deterministic function to at least a portion of said document.

5. The time stamping method of claim 4 wherein said digital sequence is a hash value derived by application of a one-way hashing function to at least a portion of said document.
6. The time stamping method of claim 1 wherein said time stamp receipt further includes an identification number associated with the document originator
7. The time stamping method of claim 6 wherein said time stamp receipt further includes a sequential record number.
8. The time stamping method of claim 7 wherein the step of validating said time stamp receipt includes comparing said identification number and sequential record number with data maintained by the outside agency.
9. The time stamping method of claim 1 wherein said binding step includes signing a combination of said identifying data and said time indication using a digital cryptographic signature scheme.
10. The time stamping method of claim 1 wherein said binding step includes computing a message authentication code on a combination of said identifying data and said time indication using a secret key controlled by said outside agency.

11. The time stamping method of claim 1 wherein said binding step includes computing a hash value on a combination of said identifying data and said time indication.
12. The time stamping method of claim 1 wherein said binding step includes encrypting a combination of said identifying data and said time indication using a secret key controlled by said outside agency.
13. A method for time stamping a document comprising:
  - creating a time stamp receipt including identifying data associated with said document and a time indication;
  - transmitting said time stamp receipt to an outside agency; and
  - cryptographically binding at said outside agency said identifying data and said time indication.
14. The time stamping method of claim 13 wherein said identifying data comprises a digital representation of at least a portion of said document.
15. The time stamping method of claim 13 wherein said identifying data comprises a digital sequence derived by application of a deterministic function to at least a portion of said document.

16. The time stamping method of claim 15 wherein said digital sequence is a hash value derived by application of a one-way hashing function to at least a portion of said document.

17. The time stamping method of claim 13 wherein said time stamp receipt further includes an identification number associated with the document originator.

18. The time stamping method of claim 14 wherein said time stamp receipt further includes a sequential record number.

19. A method for time stamping a document comprising:

creating a time stamp receipt including identifying data associated with said document and a time indication;

transmitting said time stamp receipt to an outside agency;

validating said time stamp receipt at said outside agency by comparing the time indication in said time stamp receipt to the current time; and

if said time stamp receipt is valid, binding at said outside agency said

identifying data and said time indication using a cryptographic binding scheme to generate a certified time stamp receipt.

20. The time stamping method of claim 19 further including transmitting said binding information to a designated party.

21. The time stamping method of claim 19 wherein said identifying data comprises a digital representation of at least a portion of said document.
22. The time stamping method of claim 21 wherein said identifying data comprises a digital sequence derived by application of a deterministic function to at least a portion of said document.
23. The time stamping method of claim 22 wherein said digital sequence is a hash value derived by application of a one-way hashing function to at least a portion of said document.
24. The time stamping method of claim 19 wherein said time stamp receipt further includes an identification number associated with the document originator
25. The time stamping method of claim 24 wherein said time stamp receipt further includes a sequential record number.
26. The time stamping method of claim 25 wherein the step of validating said time stamp receipt includes comparing said identification number and sequential record number with data maintained by the outside agency.

27. The time stamping method of claim 19 wherein said binding step includes signing a combination of said identifying data and said time indication using a digital cryptographic signature scheme.
28. The time stamping method of claim 19 wherein said binding step includes computing a message authentication code on a combination of said identifying data and said time indication using a secret key controlled by said outside agency.
29. The time stamping method of claim 19 wherein said binding step includes computing a hash value on a combination of said identifying data and said time indication.
30. The time stamping method of claim 19 wherein said binding step includes encrypting a combination of said identifying data and said time indication using a secret key controlled by said outside agency.